

ELECTROMECHANICAL ACTUATORS

Abstract of the Disclosure

5 A perovskite compound of the formula, $(\text{Na}_{1/2}\text{Bi}_{1/2})_{1-x}\text{M}_x(\text{Ti}_{1-y}\text{M}'_y)\text{O}_{3\pm z}$, where
M is one or more of Ca, Sr, Ba, Pb, Y, La, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm,
Yb and Lu; and M' is one or more of Zr, Hf, Sn, Ge, Mg, Zn, Al, Sc, Ga, Nb, Mo, Sb,
Ta, W, Cr, Mn, Fe, Co and Ni, and $0.01 < x < 0.3$, and $0.01 < y < 0.3$, and $z < 0.1$
functions as an electromechanically active material. The material may possess
10 electrostrictive or piezoelectric characteristics.